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| APPLICATION NO.       | N NO. FILING DATE |            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|-----------------------|-------------------|------------|----------------------|-------------------------|------------------|--|
| 09/665,200 09/18/2000 |                   | 09/18/2000 | Jonas Karlsson       | 34645-00498USPT         | 4093             |  |
| 38065                 | 7590              | 12/23/2003 |                      | EXAMINER                |                  |  |
| ERICSSO               |                   | _          | WAHBA, ANDREW W      |                         |                  |  |
| 6300 LEGA<br>M/S EVW  |                   | E          | ART UNIT             | PAPER NUMBER            |                  |  |
| PLANO, TX 75024       |                   |            |                      | 2661                    |                  |  |
|                       |                   |            |                      | DATE MAILED: 12/23/2003 | 3                |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application No.     |                      | Applicant(s)                                  |             |  |  |  |  |
|--|---|---------------------|----------------------|---|-------------|--|--|--|--|
|  | •   | 09/665,200          |                      |   | SSON ET AL. |  |  |  |  |
|  | Office Action Summary   |                     |                      |   | <u> </u>    |  |  |  |  |
|  | ,   | Examiner            |                      | Art Unit                                      |             |  |  |  |  |
|  | The MAII ING DATE of this communication and   | Andrew W Wahba      |                      | 2661  | drass       |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |                     |                      |   |             |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status  |   |                     |                      |   |             |  |  |  |  |
| 1)⊠  | Responsive to communication(s) filed on $\underline{16 \text{ S}}$  | eptember 2000.      |                      |   |             |  |  |  |  |
| 2a)□   | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |                     |                      |   |             |  |  |  |  |
| 3)□  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |                     |                      |   |             |  |  |  |  |
| Disposition of Claims  |   |                     |                      |   |             |  |  |  |  |
| 4)🖂  | ☑ Claim(s) <u>1-16</u> is/are pending in the application.   |                     |                      |   |             |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |                     |                      |   |             |  |  |  |  |
| 5)□  | Claim(s) is/are allowed.  |                     |                      |   |             |  |  |  |  |
| 6)⊠  | ☑ Claim(s) <u>1-4,8-12 and 16</u> is/are rejected.  |                     |                      |   |             |  |  |  |  |
| 7)🖂  | ☑ Claim(s) <u>5-7 and 13-15</u> is/are objected to.   |                     |                      |   |             |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.  |   |                     |                      |   |             |  |  |  |  |
| Applicati  | ion Papers  |                     |                      |   |             |  |  |  |  |
| 9) The specification is objected to by the Examiner.   |   |                     |                      |   |             |  |  |  |  |
| 10)  | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |                     |                      |   |             |  |  |  |  |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                     |                      |   |             |  |  |  |  |
|  | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |                     |                      |   |             |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |                     |                      |   |             |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120  |   |                     |                      |   |             |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a) The translation of the foreign language provisional application has been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification Data Sheet. 37 CFR 1.78. |   |                     |                      |   |             |  |  |  |  |
| Attachmen  |   | ., <del>( )</del> . |                      | (DTO 440) D                                   |             |  |  |  |  |
| 2) Notic   | ce of References Cited (PTO-892)<br>ce of Draftsperson's Patent Drawing Review (PTO-948)<br>mation Disclosure Statement(s) (PTO-1449) Paper No(s) _   | 5) 🔲 (              | Notice of Informal P | (PTO-413) Paper No(<br>atent Application (PTC |             |  |  |  |  |

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 4, 8, 12, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claims 4 and 12, the limitations of the phrase "substantially later" are not understood. With regard to claims 8 and 16, the phrase "substantially the same" is not understood. The MPEP 2173.05 (b) discusses usage of the term "substantially."

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohshima. With respect to the limitations of claim 1, in which a data frame is

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processed according to a first process and a second process simultaneously,

Ohshima discloses a CDMA type RAKE receiver. Finger circuits that extract

reception data from multipath signals process the received signal simultaneously.

With respect to the claim limitation that selected segments of the data frame

processed according to the first process are combined with selected segments of
the data frame processed simultaneously according to a second process,

Ohshima presents a RAKE combining portion (column 6, line 63 to column 7, line

9).

With respect to claim 9, Ohshima discloses a CDMA type RAKE receiver. With respect to the limitations of claim 9 in which a first processor and second processor simultaneously process the data frame, Ohshima discloses finger circuits that extract reception data from multipath signals and process the received signal simultaneously. With respect to the claim limitation in which a selector is coupled to the first and second processors, said selector adapted to combine selected segments, Ohshima presents a RAKE combining portion (column 6, line 63 to column 7, line 9).

#### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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6. Claims 2, 3, 10, and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshima. Claims 2 and 10 are dependent on claims 1 and 9, respectively. The limitations of claims 1 and 9 are disclosed in the Ohshima patent as shown in FIG. 3. The Ohshima patent does not teach or fairly suggest the use the use of a buffer to temporarily store the combined data segment. With respect to the additional limitations of claims 2 and 10 in which combined segments are temporally stored in a buffer, the applicant discloses this limitation as prior art as shown in FIG. 2 of the specification. A buffer or other memory device may be employed to store the data segment prior to additional processing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a buffer or other memory devices in the event that the combined data segment would undergo additional evaluation.

Claims 3 and 11 are dependent on claims 1 and 9, respectively. The limitations of claims 1 and 9 are disclosed in the Ohshima patent as shown in FIG. 3. The Ohshima patent does not teach or fairly suggest a de-interleaving and decoding device to process the combined data segment. With respect to the limitations of claim 3 and 11 in which the combined segments are de-interleaved and decoded, the applicant discloses this limitation as prior art as shown in FIG. 2 of the specification. A de-interleaving and decoding device may be employed so that errors do not occur in consecutive bits. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a de-interleaving and decoding device to reduce errors in the combined data segment.

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### Allowable Subject Matter

7. Claims 5-7 and 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew W Wahba whose telephone number is (703) 305-4684. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-9509.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Andrew Wahba

December 15, 2003

Chur T. Nfright

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600